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Using High-Impact HIV Prevention to Achieve the National HIV/AIDS Strategic Goals in Miami-Dade County, Florida: A Case Study

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Abstract

In response to the release of the National HIV/AIDS Strategy, the Centers for Disease Control and Prevention developed the “Enhanced Comprehensive HIV Prevention Planning” (ECHPP) project, which provided support to health departments in 12 Metropolitan Statistical Areas with the highest AIDS prevalence to strengthen local HIV programs. We describe a case study of how one MSA, Miami-Dade County, developed and implemented a locally tailored plan. Examples include actions to reinforce local partnerships and identify neighborhoods with highest unmet needs; an improved condom distribution system to assist local HIV care providers; collaboration with local stakeholders to establish a new walk-in center for transgender client needs; and overcoming incompatibilities in health department and Ryan White program computer record systems to facilitate faster and more efficient patient services. These examples show how jurisdictions both within Florida and elsewhere can create low-cost and sustainable activities tailored to improve local HIV prevention needs.

Keywords

“Enhanced Comprehensive HIV Prevention Planning” project; CDC; comprehensive HIV planning and program improvement; Miami-Dade County

HIV/AIDS remains a significant public health threat in the United States, despite advances in biomedical treatment and development of evidence-based behavioral interventions to

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reduce HIV-related sex and injection drug risk behaviors and incident STDs.^{1–3} The Centers for Disease Control and Prevention (CDC) estimates that in 2013, 47,352 people were newly diagnosed with HIV, an estimated 17,173 died with AIDS in 2012, and over 1.2 million were living with HIV infection in the U.S. in 2013.^{4,5} Many African American and Hispanic/Latino groups, injection drug users, men who have sex with men, and some youth subgroups currently are disproportionately affected by HIV in the U.S.⁵

To better address this challenge, in July 2010 the White House released the National HIV/AIDS Strategy (NHAS).⁶ This comprehensive plan provides broad goals and specific measurable targets to be achieved by the year 2015, and the plan is being updated to address next steps in 2016 to 2020. The four major NHAS goals are: (1) reduce the number of new HIV infections each year; (2) increase access to care and improve health outcomes for people living with HIV/AIDS (PLWH); (3) reduce HIV-related disparities and health inequities; and (4) achieve a more coordinated national response across Federal agencies, in partnership with state, territorial, tribal, and local governments.

Following release of NHAS, CDC developed the “Enhanced Comprehensive HIV Prevention Planning” (ECHPP) project.⁷ ECHPP was a 3-year demonstration project that ran from October 2010 through September 2013. It provided funding and technical assistance for the 12 Metropolitan Statistical Areas (MSAs) with the highest AIDS prevalence in the United States. These 12 ECHPP MSAs represent 44% of the estimated AIDS cases in the nation, as of the end of December 2007. The 12 MSAs included: Atlanta, GA; Baltimore, MD; Chicago, IL; Dallas, TX; Houston, TX; Los Angeles, CA; Miami-Dade, FL; New York City, NY; Philadelphia, PA; San Francisco, CA; San Juan, PR; and Washington, DC. ECHPP required participating health departments to design and implement a program that addressed NHAS goals and enhanced local HIV/AIDS prevention to the maximum extent, and included a set of 14 required and 10 optional recommended interventions.^{7,8} NHAS and ECHPP subsequently became a foundation for a series of related programmatic and research efforts, including an array of additional projects sponsored by both CDC and the National Institutes of Health (NIH).⁹

The first two required ECHPP interventions were to enhance routine opt-out HIV testing in clinical settings, and to increase targeted HIV testing in non-clinical settings.^{7,8} Nine more required interventions aimed to improve prevention with PLWH.^{7,8} These interventions include strengthening linkage of newly diagnosed persons to care; promotion of retention or re-engagement of PLWH in care; provision of antiretroviral therapy consistent with current guidelines; promotion of adherence to antiretroviral medications; STD screening; prevention of perinatal transmission; ongoing partner services; behavioral risk screening and interventions to reduce HIV transmission risk; and linkage of PLWH to other medical and social services. The final three required ECHPP interventions included improving condom distribution targeted to PLWH and persons at greatest risk of acquiring new HIV infection; provision of non-occupational post-exposure prophylaxis (nPEP); and efforts to change existing structures, policies and regulations that pose barriers to optimal HIV prevention, care and treatment.

This paper describes a case study of how one of the ECHPP MSAs, Miami-Dade County, Florida, developed and implemented a locally tailored plan to strengthen HIV intervention delivery in their jurisdiction. Miami-Dade County implemented numerous activities for all the required ECHPP interventions, and achieved many successes. However, because of space constraints, in this paper we describe a partial selection of Miami-Dade's ECHPP work, which we believe provides useful and illustrative examples. A comprehensive and detailed description of other activities can be viewed elsewhere.⁷ By describing this selection of Miami-Dade County's experiences, our intent is to help other jurisdictions both within the state of Florida and across the country understand how they can create and conduct similar programs. When selecting which examples to include in this paper, we prioritized ECHPP activities that (1) helped Miami-Dade meaningfully improve its HIV prevention and treatment system, and (2) were inexpensive, as well as potentially adaptable and sustainable in other jurisdictions elsewhere in Florida or other states.

HIV/AIDS in Miami-Dade County, Florida

Prior to the start of ECHPP in late 2010, at the end of 2009 the Miami region had the highest rate of new HIV diagnoses of any U.S. Metropolitan Statistical Area (56.6 per 100,000).¹⁰ In 2009, almost three-quarters of reported new HIV infections in Miami-Dade County were among men who have sex with men (MSM).¹⁰ Incidence rates were highest among black, non-Hispanics at a rate of 112.4 per 100,000, compared to 34.5 for Hispanics and 38.8 for white, non-Hispanics. Similarly, the rate of new AIDS cases for black, non-Hispanics in Miami-Dade County was 95.7 per 100,000, while the rate of new AIDS cases for Hispanics and white, non-Hispanics were 21.4 and 21 per 100,000, respectively.¹⁰ As of June 3, 2010 and only four months before ECHPP activities began, there were 24,151 PLWH in Miami-Dade County. Of these, 47% were black, non-Hispanic and 38% were Hispanic. Males represented the largest group of PLWH at 70%.¹⁰ HIV is unevenly distributed in Miami-Dade County. According to local surveillance data by Zip code, high HIV/AIDS incidence and prevalence are concentrated in low-income communities in the northeast section of the County.¹⁰ Throughout the County, elevated HIV rates and difficulties accessing HIV prevention and care services are apparent among specific racial/ethnic groups, men who have sex with men, and transgender persons.¹⁰

The Florida Department of Health in Miami-Dade County (FDOH) is the local branch of the state of Florida's Department of Health. The Office of HIV/AIDS is responsible for promoting HIV/AIDS prevention services throughout the Miami area. This office conducts an array of HIV/AIDS prevention activities, including health education or risk-reduction activities, counseling and testing services, collection of surveillance data, and coordinating patient care services (e.g., overseeing the Federal government's Health Resources and Services Administration's (HRSA) Ryan White HIV/AIDS "Part B" health care and support services grants, and HRSA's AIDS Drug Assistance Program (ADAP) grants for assisting with purchase of HIV medications for PLWH).¹⁰ The Office of HIV/AIDS also implements special national, state, and local projects, including ECHPP.

Methods

Shortly after the health department received its ECHPP grant from CDC, a baseline situation analysis was conducted to comprehensively assess HIV/AIDS-prevention needs throughout Miami-Dade County.^{7,8,11} To assist with their work, the health department contracted with the Health Council of South Florida (HCSF), a non-profit organization that assists government and non-government agencies conduct regional health planning and implementation activities.^{7,11} ECHPP situation analysis and planning activities were reviewed by the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, and determined to be a public health program activity that did not require human subjects research review.

Results of the Miami-Dade situation analysis were used to create a set of locally tailored strategies, goals, and objectives aimed at improving HIV prevention in the County. Considerable effort was made to solicit and include input from numerous individual stakeholders, multiple community groups, and health care providers. This helped ensure that the ECHPP plan realistically matched Miami-Dade County's needs, as well as promoted wide-spread stakeholder awareness and support. The situation analysis and planning included four steps:

1. **Data Review:** A comprehensive data review examined HIV and AIDS incidence, prevalence and mortality statistics for Miami-Dade County from 2000 to 2009. When possible, data were classified by race/ethnicity, gender, age, exposure category, and Zip code within Miami-Dade County. Behavioral surveillance data were examined to assess participation in prevention services among risk groups, as well as HIV sero-prevalence and unrecognized infection numbers among intravenous drug users (IDU), at-risk heterosexuals, and men who have sex with men (MSM). Zip code level HIV/AIDS incidence and prevalence data were used to pinpoint neighborhoods with the highest HIV concentrations and service gaps.
2. **Discussions with Stakeholders:** Additional information was gathered via 25 one-on-one informal phone discussions with local stakeholders, including HIV/AIDS program funding managers; HIV medical providers; directors of community-based organizations servicing HIV/AIDS clients; directors of organizations that provide HIV counseling and testing; organizations providing substance abuse treatment and counseling services to PLWH; administrators of organizations servicing youth, the incarcerated, the homeless, intravenous drug users, MSM and transgender populations; individuals living with HIV/AIDS; and ethnic minorities. Stakeholders helped HCSF and FDOH in Miami-Dade County identify resource gaps, prevention and care needs for prioritized groups and neighborhoods, and elaborate on past barriers to HIV intervention service delivery. Stakeholders also provided suggestions regarding HIV prevention and care interventions and strategies that should be scaled up or down, and helped identify resources that might be leveraged to maximize the reach and impact of HIV services.
3. **Group Listening Sessions:** Perspectives of PLWH in Miami-Dade County were identified through three listening sessions with groups living in neighborhoods with

high HIV/AIDS rates. Each group included approximately 12–15 individuals, and they discussed common barriers in accessing HIV-related care and services. In the first group, HCSF staff met with PLWH who were African American or black, Hispanic/Latino, substance abusers, and/or homeless. The second group comprised individuals from underserved populations, including the elderly, women with children, and undocumented immigrants. The final group included MSM and transgender individuals. Four more listening sessions targeted HIV/AIDS case managers and service providers.

4. **Strategic Planning Meetings with Stakeholders:** The HCSF and health department staff used this information to create initial lists of activities to improve HIV prevention service delivery. Next, between December 2010 and January 2011, they convened group meetings with key stakeholders (i.e., local health care providers, staff from community-based organizations, researchers, and representatives from PLWH advocacy groups). Stakeholder input helped refine and prioritize the intervention improvement activities, with particular attention on how to improve delivery of the 14 required ECHPP interventions.

Results

The HCSF worked with County and State Department of Health staff to compile the situation analysis results into a single document. Based on needs identified during the situation analysis, an initial set of evidence-based and locally tailored strategies, goals, and objectives were written in a comprehensive program plan. The two documents were extensively reviewed by State and Federal partners to ensure they complemented other local and state HIV programmatic efforts, and were consistent with NHAS and high-impact HIV prevention principles. Final versions were completed in March 2011.^{7,11} This comprehensive HIV program improvement plan for Miami-Dade County was one of the main products from ECHPP. A selection of some of the situation analysis and the program plan components are summarized below; the complete document is available elsewhere.⁷ Miami-Dade County did not drop any activities as a result of the ECHPP planning process, but they did de-prioritize some activities, such as prevention for HIV-negative populations and testing in low incidence areas. The ECHPP planning process was instrumental because it allowed the jurisdiction to enhance prevention services, as well as build partnerships and collaborations throughout the County. This resulted in a more targeted and coordinated system of HIV prevention, care and treatment.

Prioritize Intervention Improvement in Specific Neighborhoods and Populations

Epidemiologic data examined during the situation analysis reviewed unpublished HIV surveillance data by Zip code areas within the County. The neighborhoods prioritized for subsequent ECHPP activities were identified because they included Zip code areas that had some of the highest HIV incidence rate estimates in the County, including one area had 310 new HIV infections per 100,000 residents per year in 2009 (details withheld for confidentiality). This epidemiologic data was reinforced by stakeholder input gathered during the situation analysis. Based on this information, Miami-Dade prioritized ECHPP intervention improvement in four neighborhoods: Overtown, Liberty City, Little Haiti, and

South Beach. Based on additional stakeholder recommendations, a fifth target community, Homestead, was selected because of this area's geographic isolation and distance from HIV health and social services providers in central Miami with large racial and ethnic minority populations. Within these five target areas, health department staff further focused on white, black and Hispanic men who have sex with men (MSM); black intravenous drug users (IDU); transgender populations; and other non-MSM black and Hispanic/Latino groups. A detailed Miami-Dade County map showing the distribution of PLWH by neighborhood, race/ethnicity, age, gender, and HIV risk behavior categories is available elsewhere.¹²

Improved Condom Distribution through use of Regional Centers

The situation analysis noted that there was a need to improve regional condom distribution and enhance capacity to reach populations at highest risk, especially within the prioritized Miami neighborhoods. Prior to ECHPP, the FDOH stored and distributed condoms from a single centralized facility in Miami. Community HIV/STD prevention providers, such as staff from clinics or community based organizations (CBOs), drove to this site whenever their organizations needed new supplies. However, Miami-Dade is 1,898 square miles in area, and is one of the most congested metropolitan regions in Florida. Approximately 3,163,000 travelers commute each business day on Miami-Dade roads during peak hours. Prior to ECHPP, providers expended a large amount of time driving to pick up condom supplies because they were located, in some instances, over 60 miles from the condom distribution facility. Health department financial and staff labor constraints precluded mailing the condoms to the provider offices using express package delivery services. The ECHPP situation analysis noted that this was a particularly inconvenient and inefficient process for provider facility staff.

To address this problem, during the initial ECHPP implementation the state's FDOH contracted five HIV/STD providers to serve as regional condom distributors within the metropolitan area. After making this arrangement, these five providers received condom shipments from the Florida state health department in Tallahassee, and redistributed them to other community HIV/STD prevention provider organizations throughout the County. Provider organization staff were able to go to their nearest regional distribution center to restock. To help monitor and evaluate the program, the regional distributors submit monthly logs indicating the number of condoms they distributed.

The new condom distribution process was more convenient for community HIV/STD prevention providers because it reduced their labor and transportation costs for replenishing their condom supplies. It also ensured that condoms were consistently available and accessible within the five Miami-Dade target communities identified during the situation analysis. Based on successes with the initial regional condom distributors, the health department recruited four additional regional centers in the County. These were strategically selected based on their location, size, business hours and HIV prevention needs in their adjacent neighborhoods. After the new system was established, provider staff commuted less than 15 miles to reach a distribution center.

The new distribution process also was successful in distributing condoms to high priority populations, including PLWH, commercial sex workers, high STD populations, transgender

persons, MSM, and low SES individuals, especially within the five targeted ECHPP neighborhoods. During the ECHPP implementation period from 2011 to 2013, condoms were distributed to the regional distribution centers. For example, during the 2012 calendar year, 2,573,750 male condoms and 10,200 female condoms were distributed by these centers throughout the MSA (a detailed Miami-Dade condom distribution map for that year is available elsewhere¹³). Furthermore, the enhancement of the condom distribution process through ECHPP allowed for increased accountability by collecting specific information on condoms distributed to priority populations as opposed to only aggregate information (e.g., from January to July 2013, 56,000 condoms were distributed to people living with HIV and 519,000 to high-risk HIV-negative or -unknown status people). These targeted analyses are now the gold standard for reporting, and entire process has been sustained after ECHPP funding ceased. Because the system represents a low financial cost to the state health department and works so well, it has been easy for Florida to sustain the new condom distribution system after ECHPP ended in September 2013 on through to the present.¹³

Engaging the Miami-Dade Transgender Community through a New Drop-in Center

As a means to better assist underserved populations, the situation analysis described a need to establish non-traditional points of entry and access to health services. For example, prior to ECHPP, members of the transgender community in Miami-Dade County commuted long distances to Broward County to access culturally sensitive services and information. Based off the ECHPP situation analysis, it became apparent that creating a more accessible and conveniently located drop-in resource center could help to improve outreach and HIV prevention services for transgender persons. The situation analysis showed that transgender persons in Miami-Dade County expressed feeling disenfranchised and isolated from the rest of the HIV-affected populations in Miami-Dade.

In response, the FDOH collaborated with community partners to coordinate and establish the first ever drop-in resource center for the transgender population in Miami-Dade. The new drop-in center opened in April 2013. It received no funding from the ECHPP grants, and initially was staffed by community volunteers two days a week. The facility is physically located near where many transgender persons live in Miami-Dade County, and continues to be active after ECHPP officially ended in September 2013. As of April 24, 2014, the center has assisted 41 transgender Miami-area residents. In addition to HIV/STI testing services and condom distribution, the center has helped clients with accessing health care, employment counseling, psychotherapy, support groups, immigration status issues, and domestic violence or discrimination. This drop-in resource center has been sustained after ECHPP ended because it serves a marginalized group with high HIV prevention and treatment needs, relies on community volunteers, and uses no FDOH funds.

Strengthened Linkage to Care through Improved Health Department and Ryan White Part A/Minority AIDS Initiative (MAI) Program Collaboration

Information reviewed by the situation analysis showed that in fiscal year 2008, 5,739 PLWH living in the county were estimated to be out of HIV medical care. Moreover, throughout the situation analysis, numerous stakeholders noted there was a need to strengthen coordination

between public health HIV testing and treatment services. Prior to ECHPP, many persons who tested positive were not linked to medical care.

The HRSA Ryan White Program provides Federal funds to support HIV treatment services at six agencies dispersed throughout the County.^{10,14} These agencies connect newly diagnosed clients to care or reconnect those lost to care. In FY 2010–11, HRSA's Ryan White emergency assistance grants (Part A) and Minority AIDS Initiative (MAI) grants served more than 1,000 clients by either linking the newly diagnosed to care or re-engaging those persons lost to care. Outreach services continue to increase in importance as the FDOH in Miami-Dade County's counseling and testing sites partner with Miami-Dade County's Ryan White Program to implement the ECHPP initiatives. The ECHPP situation analysis highlighted a need for sustainable programs to further improve coordination as a means to increase linkage to care among persons newly diagnosed with HIV.

As a result of ECHPP, the health department's HIV testing program and the local Ryan White Part A/MAI program expanded their existing formal agreement to allow the exchange of confidential HIV-positive client information for the purposes of improving linkage to care. This unprecedented revised agreement allowed the two programs to directly assess who tested HIV-positive and to identify who has not yet been successfully linked to Ryan White care.

Prior to ECHPP, it was not possible to easily verify if persons with new HIV diagnoses had been successfully linked to medical care at a Ryan White clinic. This was due to the County HIV testing program entering client records into a computer database that was incompatible with the system used by Ryan White Part A/MAI program personnel. During the ECHPP implementation phase, new procedures were piloted over several months that addressed a variety of technical, legal, and staffing issues.

- **Data Sharing Variables:** Data sharing planners from the health department and the Ryan White program first decided that the following client data elements were needed to make certain that a newly diagnosed HIV-positive person was not lost from the system: client name; date of birth; social security number; test site, gender; race/ethnicity; risk factors; Zip code of individuals testing positive; retention in care, treatment, and adherence; care management agency; medical provider site; last service date; AIDS Drug Assistance Program (ADAP) Enrollment; and STD Tests.
- **Legal issues:** Prior to initiating data sharing, the health department reviewed legal documentation to ensure compliance with HIPAA data sharing regulations. An existing "HIPAA Data Sharing Agreement" between the relevant parties allowed the new data sharing initiative to move forward.
- **Software and technical issues:** Software developers, who already were separately funded by the health department prior to ECHPP, designed an improved record keeping system for clients receiving HIV services in different programs. This made it easier to identify clients who had tested HIV-positive, but who were not linked to care or who had fallen out of care within the Ryan White Part A/MAI system.

- Client consent for contact by a linkage specialist: The client's consent must be documented and be on file before the linkage specialist can initiate contact to client. Miami-Dade Ryan White Part A developed and began using a consent form for newly diagnosed PLWH which authorizes Ryan White outreach workers to contact clients for the purpose of linking the newly diagnosed person to HIV medical care. The consent is signed wherever the tests are done (e.g., in clinics or mobile testing locations). The person responsible for obtaining the linkage consent form is the person performing the HIV test, either the preliminary rapid test if positive, or at the time of giving confirmatory results.
- Contact by the linkage specialist: Only authorized staff affiliated with the health department and Ryan White clinics are allowed access to these data to ensure patients' confidentiality. Linkage outreach workers are notified when a report is ready for retrieval. Assuming that the client's consent is on file, the outreach workers then contacts the HIV-positive client and assists the individual to become linked to medical care. Clients typically are linked by their residential Zip code to their nearest Ryan White Program that can provide the care services.
- Quality control: Staff from both programs participate in a quality management team to monitor this new process and to develop solutions. Counseling and testing sites undergo periodic site visits to ensure compliance and to help identify gaps. Participating staff in both the counseling and testing sites or in Ryan White facilities have names and contact information for quality management team members, in case they need any technical assistance. Some of the common factors that affect successful linkage to care include patient reluctance to get into care; patient inability to follow through because of mental health or substance abuse issues; and tests done for non-County residents who are in tourist areas, and therefore are not linked to Miami-Dade County HIV care and treatment services. The County presently is compiling data to document long-term improvement in linkage services.
- Sustainability: Because these efforts largely relied upon improved labor coordination among existing personnel and programs, and they did not require on-going input of ECHPP grant support from CDC, it was straightforward for Miami-Dade stakeholders involved with the process to continue the data sharing and linkage to HIV care service improvements after ECHPP funding ended in September 2013.

Improved Access to HIV Treatment Drugs and Other Needed Services for Low Income Persons

Even when PLWH are linked to care, many low-income persons have difficulty purchasing HIV treatment drugs. As noted by the situation analysis, many PLWH in Miami-Dade County are low income and have insufficient financial resources to obtain essential medical care. As in many other U.S. jurisdictions, Miami-Dade County participates in the Federal HRSA Ryan White Part A, Part B, and Minority AIDS Initiative (MAI) programs.¹⁴ With Part A or MAI support, the health department assists eligible HIV-positive County residents receive outpatient medical care, medical case management services, prescription drugs, oral

health care, health insurance assistance services, substance abuse counseling or treatment, mental health services, transportation assistance for receiving medical care, food and nutritional assistance, legal assistance, and psychosocial support services. Ryan White Part A/MAI clinics in Miami-Dade County uses the Service Delivery Information System (SDIS) database system developed by Automated Case Management Systems, Inc. (ACMS) for client record keeping, social service referrals, and billing. At present, SDIS is used by all Ryan White Part A and MAI funded service organizations within Miami-Dade County. All participating organizations can enter and share client records and progress notes in the SDIS system, which greatly reduces duplication of record-keeping tasks, and promotes coordination of patient care across Part A/MAI clinics. Miami-Dade HIV care providers follow the most up-to-date treatment recommendations.¹⁵

Some patients who receive Part A or MAI services also are eligible for Part B “AIDS Drug Assistance Program” (ADAP) support. However, these record-keeping databases also were not compatible prior to ECHPP. This meant that each time a Part A/MAI patient was referred to Part B for help in purchasing their medications, a Part B staff person needed to manually re-type the patient’s records. The ECHPP situation analysis noted that this potentially created transcription errors, wasted valuable staff time, and frustrated HIV-positive clients who sometimes needed to re-provide duplicative information.

Based on these ECHPP situation analysis results, the health department implemented another process to enable data sharing between Ryan White Part A/MAI and Part B programs. This data sharing process helped reduce transcription errors and the amount of time required during the ADAP intake process. By taking these steps, the system not only has become more efficient by eliminating duplicative efforts, but low-income HIV-positive clients who are eligible for ADAP assistance are able to receive their HIV treatment medications in a timely manner. This helped Miami-Dade County to ensure consistent with recommended HIV treatment guidelines, and that PLWH were provided with anti-retroviral therapy as soon as possible.

As with our previously discussed examples, these data sharing improvements for ensuring that eligible PLWH in Miami-Dade County efficiently received ADAP assistance did not require on-going ECHPP support. The improved system therefore was fully sustainable after the ECHPP grants ended in September 2013.

Discussion

The Miami-Dade ECHPP project provided many valuable opportunities to address NHAS goals, and to strengthen the entire HIV prevention and care system at the local level. First, the ECHPP situation analysis yielded an in-depth and detailed assessment of the system’s strengths, weaknesses, and high-priority needs. In this jurisdiction, the situation analysis highlighted pressing needs concentrated in five Miami-Dade neighborhoods. This finding by itself helped the health department know where to focus many of its major HIV prevention efforts.

Overall, the ECHPP project asked Miami-Dade County and the other 11 funded jurisdictions to develop and implement a locally-tailored and data-driven plan to improve HIV prevention and care. As a first step, each ECHPP grantee reviewed local surveillance data, testing and partner services data, Ryan White Part A and B programs, and other available information. Together with input from key stakeholders, the results were compiled into in-depth situation analysis reports, which served as the basis for making subsequent action plans in the ECHPP intervention areas.⁸ Compared with some of the other ECHPP grantees, Miami-Dade County made particular effort to systematically obtain and incorporate stakeholder input via community listening sessions and individual discussions. Miami-Dade was able to do a thorough situation analysis in part because they had ECHPP funds from their CDC grant, as well as local expertise available from the HCSF non-governmental organization. Other jurisdictions that do not have these types of resources might need to conduct less comprehensive situation analyses.

In contrast to the approach used by Miami-Dade County, other ECHPP jurisdictions made greater effort to develop data-driven planning models. Philadelphia, for example, worked with CDC staff to develop an economic resource allocation model as part of their ECHPP planning.¹⁶ Similarly, the New York City and Los Angeles ECHPP locations developed locally tailored economic decision-making tools to optimally use resources for HIV prevention and care services.^{17,18} Other jurisdictions considering similar future work might combine situation analysis methods used by Miami-Dade to learn insights from stakeholders, as well as resource modeling efforts used in some of the other ECHPP sites to help allocate and tailor economic resources in optimal ways within their regions. Comprehensive situation analyses, coupled with well-done resource allocation models, may provide different yet complementary information useful for improving HIV prevention, care, and treatment in jurisdictions elsewhere in the United States.

The ECHPP situation analysis in Miami-Dade identified bottlenecks in delivery of HIV prevention services. For example, staff from local HIV/STD clinics and CBOs previously used excessive amounts of time to pick up condoms from a single central health department facility. The solution was to create multiple strategically located condom distribution points throughout the County to facilitate fast access for replenishing condom supplies. This allowed local HIV/STD clinic and CBO provider organizations to devote more of their staff time to client services as opposed to driving long distances through heavy Miami-area traffic just to pick up and transport cartons of condoms.

The situation analysis also underscored population-specific needs and potential solutions. For example in the past, Miami-Dade transgender residents often felt disenfranchised from HIV services. By strengthening and creating new collaborations with local partners outside of the health department, Miami-Dade was able to establish a transgender drop-in center. The center provided new pathways to deliver multiple important HIV intervention services to this population. Moreover, by using strengthened community partnerships, this activity did not require additional expenditure of any health department funds. To better provide HIV services to transgender or other populations, other jurisdictions might consider forming these types of partnerships with neighborhood CBOs.

As in many jurisdictions, different parts of the local HIV prevention and treatment system do not always work together efficiently and can create barriers. Current best practice recommends well-integrated HIV treatment programs for both adults and adolescents.¹⁵ In Miami-Dade before ECHPP, incompatibilities in computer record-keeping systems and between local health department offices responsible for HIV testing and Ryan White Part A/MAI clinics providing treatment services interfered with ensuring that HIV clients were linked to medical care. Similarly, incompatibilities between Ryan White Part A/MAI clinic record-keeping systems versus Ryan White Part B ADAP drug assistance databases sometimes meant that eligible low-income persons did not receive timely access to HIV treatment drugs. The ECHPP effort in Miami-Dade resulted in long-term sustainable improvements in data sharing and labor coordination among these key organizations involved with HIV prevention, care, and treatment.

Miami-Dade explicitly used several over-arching principles to guide the entire ECHPP planning process:

- First, the health department wanted the process to be as objective and unbiased as possible. This helped reduce the perception among community stakeholders that the health department had a hidden agenda or was showing favoritism to some groups or organizations. To reinforce the impartiality of the planning process, the health department hired a neutral third party (HCSF) to assist with planning and community buy-in throughout ECHPP.
- Second, Miami-Dade and HCSF consistently engaged as many stakeholders as possible during all phases of the ECHPP project, including HIV/AIDS funding managers, medical providers, community based organizations, HIV counseling and testing organizations, substance abuse treatment organizations, staff from groups serving specific populations (e.g., youth, incarcerated persons, homeless persons, intravenous drug users, MSM, and transgender persons), PLWH throughout the county, ethnic minorities, university researchers, as well as staff from various local, state, and federal programs.
- Third, Miami-Dade paid special attention to understanding the needs of PLWH, and made specific efforts to hear their input and concerns (e.g., via the group listening sessions during the situation analysis).
- Finally, after creating initial drafts of the locally tailored goals and objectives needed to implement the ECHPP interventions, Miami-Dade repeatedly re-engaged stakeholders to ensure that the plans and implementation activities were appropriate, realistic, and would have maximum HIV public health utility in the County. Rather than rigidly adhering to the initial goals and objectives during the ECHPP implementation phase, Miami-Dade treated the plan as a “living breathing document,” which allowed for fine-tuning and useful adjustments during subsequent implementation activities.

Cultivation of high quality partnerships, trust, and mutual respect among a broad range of community stakeholders requires long-term and sustained efforts from the health department over many years. During his first Miami-Dade site visit in December 2010, the CDC project

officer for this activity (author JC) immediately noticed this key element in how stakeholders communicated with each other during a “Community Stakeholders Strategic Planning Session” convened for ECHPP, and held on the University of Miami campus. Approximately 50 to 60 persons attended, including university researchers, clinical HIV service providers, personnel from a wide array of community based organizations, and representatives from various populations heavily affected by HIV in the County, as well as state and local governmental officials. Although not everyone agreed on specific details and priorities, it was clear that all stakeholders understood the linkages of ECHPP with NHAS priorities, and they were willing to work together to implement the project.

In addition to coordination and communication among local stakeholders involved with ECHPP planning, Miami-Dade needed to successfully find ways to overcome several cross-cutting challenges throughout the project. Some of these included:

- Communication and coordination among federal agencies, especially in terms of separate funding streams and data reporting requirements;
- Limited awareness and communication among local service agencies in the county;
- Barriers in accessing medical care for PLWH; and
- A general concern that increased HIV testing would lead to an increased volume of known PLWH, which in turn could overwhelm the capacity of HIV service programs.

As we discussed in this paper, Miami-Dade proactively worked to address these cross-cutting challenges. For example, by improving coordination and data sharing between the health department and Ryan White programs, Miami-Dade increased program efficiencies and reduced barriers to medical care for many PLWH.

After initial planning was completed, stakeholder input and collaboration also was essential throughout the ECHPP implementation phase (April 2011 to September 2013). Local health department staff had numerous on-going communication and coordination efforts on a daily or weekly basis. In addition, the HCSF assisted the local and state health departments to schedule periodic stakeholder meetings that were attended by CDC staff. For example, during one of these meetings in September 2011, CDC staff met with local health department staff called “champions,” who each were assigned responsibility to implement specific elements of the local ECHPP goals and objectives. During the champions meeting, the entire group updated each other on their progress, as well as had brainstorming discussions on ways to overcome unmet needs or make improvements. At a similar community-wide stakeholder meeting held in September 2012, one of the local health department staff (author KV) identified and summarized successful elements of the ECHPP implementation including:

- Broad review and use of local HIV prevention service resources;
- Supporting an on-going partnership network of diverse local stakeholders involved with HIV prevention and care;

- Coordinated collaboration among a diverse array of stakeholders, included health department champion staff and non-health department persons and organizations;
- Improved coordination for services and resources for Ryan White Part A clients;
- Improved linkage to care services for PLWH through data sharing;
- Improved collaboration and coordination among funding sources and service providers;
- Establishment of a more efficient condom distribution system; and
- Creation and implementation of a perinatal partnership.

ECHPP provided grantees time-limited financial resources and CDC technical support. Florida state and local health department staff wanted to sustain successes well after ECHPP support ended in September 2013. With the help of HCSF and CDC staff, the health department personnel proactively began sustainability planning in the spring of 2013. Later in June 2013, they held a series of sustainability meetings that included HIV control program staff from the health department, local Ryan White Part A programs, and SAMSHA (Substance Abuse and Mental Health Services Administration) staff involved with provision of substance treatment and HIV prevention services for minority populations residing in the County. In particular, the representatives of these groups discussed practical steps on how to sustain the data sharing and program coordination activities that we described earlier in this paper. The HCSF also helped the health department convene another community-wide stakeholder meeting in June 2013. During that meeting, stakeholders helped identify gaps in HIV prevention care and treatment that were not being met by ECHPP; ECHPP activities that needed to be retained and improved; why and how specific ECHPP activities should be sustained; and what ECHPP activities needed to be dropped. Stakeholder input on sustainability issues was compiled into another planning document. By the end of the ECHPP project in September 2013, local and state health department personnel developed a detailed sustainability strategy and were implementing key activities that continued afterwards on through the present. After ECHPP was over, Miami-Dade and other jurisdictions elsewhere in Florida built upon these experiences to develop new HIV plans and subsequent activities throughout the state.¹⁹

In sum, the Miami-Dade ECHPP solution for improving local HIV prevention and care involved bringing all the key parties together, and working to design and implement novel ways to re-allocate technical and human resources to overcome system inefficiencies. Many of these solutions are being sustained in Miami-Dade County after ECHPP because numerous parties agreed they work so well. The pragmatic examples we describe in this paper required minimal or no additional health department funds, but instead accomplished program improvements by altering staff activities and coordination between governmental and non-governmental stakeholders. In many cases, these solutions simultaneously strengthened local delivery of more than one ECHPP required intervention. Miami-Dade's sustainable ECHPP successes are supported by very strong collaboration, creativity, willingness to innovate, and respectful open communication between the local, state, and Federal partners; governmental and non-governmental programs; medical and non-medical provider organizations; university researchers and program service delivery personnel; and

community representatives throughout the County. Other jurisdictions hoping to implement similar low-cost high-impact NHAS improvements would likely benefit from fostering and reinforcing such partnerships between all parties involved in HIV prevention and treatment.

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References

1. Cohen MS, Chen YQ, McCauley M, et al. Prevention of HIV-1 infection with early antiretroviral therapy. *N. Engl. J. Med.* 2011 Aug 11; 365(6):493–505. [PubMed: 21767103]
2. Grant RM, Lama JR, Anderson PL, et al. Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. *N. Engl. J. Med.* 2010 Dec 30; 363(27):2587–2599. [PubMed: 21091279]
3. Abdool Karim Q, Abdool Karim SS, Frohlich JA, et al. Effectiveness and safety of tenofovir gel, an antiretroviral microbicide, for the prevention of HIV infection in women. *Science.* 2010 Sep 3; 329(5996):1168–1174. [PubMed: 20643915]
4. Prejean J, Song R, Hernandez A, et al. Estimated HIV incidence in the United States, 2006–2009. *PLoS ONE [Electronic Resource]*. 2011; 6(8):e17502.
5. Centers for Disease Control and Prevention. [Accessed May 1, 2015] Diagnoses of HIV Infection in the United States and Dependent Areas, 2013. HIV Surveillance Report. 2015. Available at: http://www.cdc.gov/hiv/pdf/g-l/hiv_surveillance_report_vol_25.pdf. 2015.
6. The White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States. 2010 <http://aids.gov/federal-resources/national-hiv-aids-strategy/nhas.pdf>.
7. Centers for Disease Control and Prevention. [Accessed March 1, 2013] Enhanced Comprehensive HIV Prevention Planning and Implementation for Metropolitan Statistical Areas Most Affected by HIV/AIDS. 2012. <http://www.cdc.gov/hiv/strategy/echpp/>.
8. SA Flores DP, Belcher L, Carey JW, Courtenay-Quirk C, Dunbar E, Eke AN, Fisher H, Galindo CM, Glassman M, Margolis AD, Spink Neumann M, Prather C, Stratford D, Taylor RD, Mermin J. for the ECHPP Project Team. Shifting resources and focus to meet the goals of the National HIV/AIDS Strategy: the Enhanced Comprehensive HIV Prevention Planning (ECHPP) Demonstration Project. Unpublished manuscript.
9. Greenberg AE, Purcell DW, Gordon CM, Barasky RJ, Del Rio C. Addressing the Challenges of the HIV Continuum of Care in High-Prevalence Cities in the United States. *J. Acquir. Immune Defic. Syndr.* 2015 May 1; 69(Suppl 1):S1–S7. [PubMed: 25867773]
10. Miami-Dade County Health Department. [Accessed May 19, 2015] Miami-Dade County Health Department: HIV/AIDS Services. 2015. <http://miamidade.floridahealth.gov/programs-and-services/infectious-disease-services/hiv-aids-services/index.html>.
11. Miami-Dade County Health Department. Miami-Dade County Enhanced Comprehensive HIV Prevention Plan (ECHPP) At a Glance. 2011 Unpublished document.
12. Miami-Dade County Health Department. [Accessed May 19, 2015] Miami-Dade County Health Department: Miami-Dade County Neighborhood Profiles, cumulative number of documented people living with a diagnosis of HIV or AIDS. 2014. http://miamidade.floridahealth.gov/programs-and-services/infectious-disease-services/hiv-aids-services/_documents/hiv-surveillance-2013-neighborhood-profile-as-of-10-2014.pdf.
13. Florida Department of Health. [Accessed May 4, 2015] Test Miami: Free Condoms information webpage. 2015. <http://www.testmiami.org/EN-Free-Condoms>.
14. Health Resources and Services Administration. About the Ryan White HIV/AIDS Program. 2013 <http://hab.hrsa.gov/about/hab/aboutprogram.html>.
15. [Accessed May 19, 2015] Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institutes of Health, et al. Recommendations for HIV

Prevention with Adults and Adolescents with HIV in the United States, 2014. 2014. <http://stacks.cdc.gov/view/cdc/26062>.

16. Lasry A, Sansom SL, Hicks KA, Uzunangelov V. Allocating HIV prevention funds in the United States: recommendations from an optimization model. PLoS ONE [Electronic Resource]. 2012; 7(6):e37545.
17. Ryan GW, Bloom EW, Lowsky DJ, et al. Data-driven decision-making tools to improve public resource allocation for care and prevention of HIV/AIDS. Health Aff. (Millwood). 2014 Mar; 33(3):410–417. [PubMed: 24590938]
18. Kessler J, Myers JE, Nucifora KA, et al. Averting HIV infections in New York City: a modeling approach estimating the future impact of additional behavioral and biomedical HIV prevention strategies. PLoS One. 2013; 8(9):e73269. [PubMed: 24058465]
19. Florida HIV/AIDS Prevention Planning Group. [Accessed May 19, 2015] 2012–2014 Florida Jurisdictional HIV Prevention Plan. 2012. http://www.floridahealth.gov/diseases-and-conditions/aids/prevention/_documents/community_mobilization/PPG-HIV-Prevention-Plan.pdf.